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MPrsch_pp  protein - protein database search, using Smith-Waterman algorithm
Run on:      Sat May 13 10:04:54 2000;  MasPar time 3.95 Seconds
Tabular output not generated.          257.923 Million cell updates/sec

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Title: >US-09-331-631-3
Description: (74-116) From US09331631.pep (3 of 5)
Perfect Score: 344
Sequence: 1 NDDPDPTDQCCQRCRCRQDESGPRQOQIQCRCKETCEEHEEY 43

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Scoring table: PAM 150
Gap 11

Searched: 188963 seqs, 23686106 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

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Database: a-geneseq35
          1:geneseqp
```

Statistics: Mean 22.293; Variance 94.911; scale 0.2335

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query			DB	ID	Description	Pred. No.
	Score	Match	length				
1	344	100.0	666	1	W62829	Macadamia integrifolia	5.65e-24
2	342	99.4	666	1	W62828	Macadamia integrifolia	8.81e-24
3	335	97.4	625	1	W62830	Macadamia integrifolia	4.18e-23
4	159	46.2	525	1	W62831	Theobroma cacao antim1	1.70e-06
5	159	46.2	566	1	R20181	Sequence encoded by 67	1.70e-06
6	127	35.9	590	1	W62832	Gossypium hirsutum ant	1.24e-03
7	111	32.3	28	1	W62841	Stenocarpus sinuatus a	3.08e-02
8	111	32.3	593	1	W62835	zea may antimicrobial	3.08e-02
9	105	30.5	33	1	W62836	zea may antimicrobial	1.01e-01
10	96	27.9	35	1	R21079	antimicrobial maize pe	5.81e-01
11	85	24.7	637	1	W62837	Hordeum vulgare antim1	4.72e-00
12	83	24.1	106	1	R91706	ACANMP23.	6.86e+00
13	83	24.1	107	1	R91705	ACANMP23.	6.86e+00
14	82	23.8	626	1	W23150	Peanut allergen Ara hi	8.27e+00
15	79	23.0	441	1	R62214	Peroxisome proliferato	1.44e+01
16	79	23.0	441	1	R41875	Steroid hormone recept	1.44e+01
17	77	22.4	614	1	W62834	Arachis hypogaea antim	2.08e+01
18	77	22.4	614	1	W22149	Peanut allergen Ara hi	2.08e+01
19	77	22.4	910	1	R91737	HER4-Ig fusion protein	2.08e+01
20	77	22.4	1058	1	R54843	HER4 with alternate 3'	2.08e+01
21	77	22.4	1058	1	R91734	Receptor tyrosine kina	2.08e+01
22	77	22.4	1308	1	R54841	HER4.	2.08e+01
23	77	22.4	1308	1	R91733	Receptor tyrosine kina	2.08e+01

5	68	19.8	1003	1	R55756	Ampev spheroideidin.	1.05e+02
44	68	19.8	1003	1	W11301	Human estrogen receptor	1.05e+02
43	68	19.8	461	1	R97982	Human foetal lung ster	1.05e+02
42	68	19.8	461	1	R62623	Human foetal lung ster	1.05e+02
41	68	20.1	898	1	W11853	Mycobacterium tubercu	8.83e+01
40	69	20.1	402	1	W57452	Human ERF-1 receptor	8.83e+01
39	69	20.1	402	1	W18652	Human apolipoprotein E	8.83e+01
38	69	20.1	204	1	W59609	DNA-binding/dimerizat	8.83e+01
37	70	20.3	1786	1	W50893	Human laminin B1 chain	7.39e+01
36	71	20.6	529	1	R38209	LDLID2D3.4pAal EGF recep	6.18e+01
35	71	20.6	509	1	R38212	LDLID2D3.4pAal EGF recep	6.18e+01
34	71	20.6	509	1	R38212	LDLID2D3.4pAal EGF recep	6.18e+01
33	71	20.6	405	1	W33737	Epidermal growth facto	6.18e+01
32	72	20.9	468	1	R74023	Human pteroxisome proli	5.16e+01
31	72	20.9	516	1	P61362	Soybean glycinin A5B4	5.16e+01
30	72	20.9	516	1	P61362	Soybean glycinin A5B4	5.16e+01
29	73	21.2	918	1	R12223	Human androgen recepto	4.31e+01
28	73	21.2	805	1	R05651	Murine Ah receptor pro	4.31e+01
27	73	21.2	768	1	R37663	Rabbit beta-8 intergri	4.31e+01
26	75	21.8	440	1	R52479	Peroxisome proliferato	3.00e+01
25	75	21.8	439	1	R33745	XRA.	3.00e+01
24	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
23	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
22	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
21	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
20	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
19	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
18	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
17	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
16	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01
15	76	22.1	919	1	W47873	Androgen receptor.	2.50e+01

ALIGNMENTS

ID	W62829:	standard; Protein: 666 AA.
AC	W62829:	
Dt	27-OCT-1998	(first entry)
DE	Macadamia integrifolia antimicrobial protein.	
Kw	antimicrobial protein;	infestation; control.
OS	Macadamia integrifolia.	
FH	Key	Location/Qualifiers
FT	Peptide	1..28
ET	Protein	/note= "signal peptide"
FN	WO9827805-A1.	/note= "mature protein"
PD	02-JUL-1998.	
PF	22-DEC-1997;	AU0874.
PR	20-DEC-1996;	AU-004275.
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.	
PI	Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;	
WP1:	98-3/72/9/32.	
DR	N-PSSD: V42311.	
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia -	
Pt	useful for controlling microbial infestations of plants or mammals	
CC	Claim 1; Page 39-41; 96pp; English.	
CC	The sequence is that of an antimicrobial protein which can	
CC	be used to control microbial infestations in plants and mammalian	
CC	animals.	
SQ	Sequence	666 AA;
Query Match	100.0%	Score 344; DB 1; Length 666;
Best Local Similarity	100.0%;	Pred. No. 5.65e-24;
Matches	43; Conservative	0; Mismatches 0; Indels 0; Gaps 0
Dd	74 NQDDPQTDCQCQRRCRQESGSRQQDYCQRCKEICEEEERY	116
Oy	74 NQDDPQTDCQCQRRCRQESGSPRQQYCYCQRKEICEEEERY	116
RESULT	2	
ID	W62828 standard; Protein: 666 AA.	
AC	W62828:	
Dt	27-OCT-1998	(first entry)
DE	Macadamia integrifolia antimicrobial protein.	
Kw	antimicrobial protein;	infestation; control.
OS	Macadamia integrifolia.	
FH	key	Location/Qualifiers
FT	Peptide	1..28
ET		/note= "signal peptide"

DB	42	QQCVQRCRQ-ER-PR---YSHARCQCECRDQDQ	69
Oy	83	QQCRRCRQSGPRQDQYQCRCKEICEEEEE	115
DB	11		
Oy	11		
DB	12		
Oy	12		
DB	17	NOV-1996	(first entry)
Oy	17	NOV-1996	(first entry)
DB	24		
Oy	24		
DB	25	APR-1996	
Oy	25	APR-1996	
DB	17	OCT-1995	U13231.
Oy	17	OCT-1995	U13231.
DB	18	OCT-1994	US-326110.
Oy	18	OCT-1994	US-326110.
DB	05	JUN-1995	US-486399.
Oy	05	JUN-1995	US-486399.
DB	05	JUN-1995	US-461965.
Oy	05	JUN-1995	US-461965.
DB	05	JUN-1995	US-486397.
Oy	05	JUN-1995	US-486397.
DB	05	JUN-1995	US-465380.
Oy	05	JUN-1995	US-465380.
DB	(CORV-)	CORVAS INT INC.	
Oy	(CORV-)	CORVAS INT INC.	
DB	Bergum PW, Gansemaans YGJ,	Jespers LS, Laroche YR;	
Oy	Bergum PW, Gansemaans YGJ,	Jespers LS, Laroche YR;	
DB	Lawereys MJ, Messens JH,	Moyle M, Stanssens PEH;	
Oy	Lawereys MJ, Messens JH,	Moyle M, Stanssens PEH;	
DB	Vlasak GP.		
Oy	Vlasak GP.		
DB	WPI: 96-222007/22.		
Oy	WPI: 96-222007/22.		
DB	N-PSDB: T12952.		
Oy	N-PSDB: T12952.		
DB	Proteins with anticoagulant and/or serine protease inhibitory		
Oy	Proteins with anticoagulant and/or serine protease inhibitory		
DB	activity - isolated from nematodes and useful to inhibit blood		
Oy	activity - isolated from nematodes and useful to inhibit blood		
DB	coagulation		
Oy	coagulation		
DB	Claim 221; Fig 13B: 243pp; English.		
Oy	Claim 221; Fig 13B: 243pp; English.		
DB	Proteins with anticoagulant and/or serine protease inhibitory		
Oy	Proteins with anticoagulant and/or serine protease inhibitory		
DB	activity, isolated from nematodes, are useful to inhibit blood		
Oy	activity, isolated from nematodes, are useful to inhibit blood		
DB	coagulation. The proteins can be added to blood collection tubes		
Oy	coagulation. The proteins can be added to blood collection tubes		
DB	defining the collection of mammalian plasma. They are also useful		
Oy	defining the collection of mammalian plasma. They are also useful		
DB	to prevent or inhibit thrombosis, and may be given alone or in		
Oy	to prevent or inhibit thrombosis, and may be given alone or in		
DB	combination with other therapeutic or in vivo diagnostic agents.		
Oy	combination with other therapeutic or in vivo diagnostic agents.		
DB	The proteins can serve as immunogens to raise antibodies for use in		
Oy	The proteins can serve as immunogens to raise antibodies for use in		
DB	the diagnosis and identification of NAP concn. levels in biological		
Oy	the diagnosis and identification of NAP concn. levels in biological		
DB	fluids, e.g. to detect mammalian infection with a parasitic worm.		
Oy	fluids, e.g. to detect mammalian infection with a parasitic worm.		
DB	They can also be used as immunogens in prophylactic and therapeutic		
Oy	They can also be used as immunogens in prophylactic and therapeutic		
DB	vaccines against parasitic worm infection. The proteins may		
Oy	vaccines against parasitic worm infection. The proteins may		
DB	double the clotting time of human plasma in prothrombin time assays		
Oy	double the clotting time of human plasma in prothrombin time assays		
DB	when present at 10-50 nMol, and double the clotting time of human		
Oy	when present at 10-50 nMol, and double the clotting time of human		
DB	plasma in activated partial thrombin time assays when present		
Oy	plasma in activated partial thrombin time assays when present		

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CC      at 10-100 nMol.
CC      The anticoagulant proteins are pref. derived from
CC      Ankylostoma caninum, A. ceylanicum, A. duodenale, Necator
CC      americanus or Heligmosomoides polygyrus.
CC      The proteins pref. have 2 NAP domains and specifically inhibit
CC      the catalytic activity of the factor VIIa/TF complex in the
CC      presence of factor Xa or a catalytically inactive factor Xa deriv.
CC      do not specifically inhibit the activation of factor VIIa in the
CC      absence of TF and do not specifically inhibit prothrombinase.
SQ      Sequence      106 AA;

Query Match          24.1%; Score 83; DB 1; Length 106;
Best Local Similarity 56.3%; Pred. No. 6,86e+00;
Matches      9; Conservative      4; Mismatches      2; Indels      1; Gaps      1

Db      39 CERCKITSEEDDY 54
       ||| | | |||::|
Oy      102 CORROCK-EICEEEY 116

RESULT      13
ID      R91705 standard; Protein; 107 AA.
AC      R91705.
DT      17-NOV-1996 (first entry)
DE      ACANAP23.
KW      ACANAP; HPCNAP; NAMNAP; ACECAP; ADUNAP; anticoagulant;
KM      nematode-extracted anticoagulant protein; serine protease;
OS      nematode; thrombosis; parasitic worm.
NC      Ankylostoma caninum.
PN      W09612021.A2.
PD      25-APR-1996.
PF      17-OCT-1995; U13231.
PR      18-OCT-1994; US-326110.
PR      05-JUN-1995; US-486399.
PR      05-JUN-1995; US-461965.
PR      05-JUN-1995; US-486397.
PR      05-JUN-1995; US-465380.
PT      (CORV-) CORVAS INT INC.
PI      Bergum PW, Gansemans YGJ, Jespers LS, Laroche YR;
PI      Vlauweys MJ, MessensJhl, Moyle M, Stanssens PEH;
PI      Vlausk GP;
DR      MPI: 96-222007/22.
DR      N-PSDB: T12951.
PT      Proteins with anticoagulant and/or serine protease inhibitory
PT      activity - isolated from nematodes and useful to inhibit blood
PT      coagulation
PS      Claim 221; Fig 13A; 243pp; English.
CC      Proteins with anticoagulant and/or serine protease inhibitory
CC      activity, isolated from nematodes, are useful to inhibit blood
CC      coagulation. The proteins can be added to blood collection tubes
CC      defining the collection of mammalian plasma. They are also useful
CC      to prevent or inhibit thrombosis, and may be given alone or in
CC      combination with other therapeutic or in vivo diagnostic agents.
CC      The proteins can serve as immunogens to raise antibodies for use in
CC      the diagnosis and identification of NAP concn. levels in biological
CC      fluids, e.g. to detect mammalian infection with a parasitic worm.
CC      They can also be used as immunogens in prophylactic and therapeutic
CC      vaccines against parasitic worm infection. The proteins may
CC      double the clotting time of human plasma in prothrombin time assays
CC      when present at 10-50 nMol, and double the clotting time of human
CC      plasma in activated partial thrombin time assays when present
CC      at 10-100 nMol.
CC      The anticoagulant proteins are pref. derived from
CC      Ankylostoma caninum, A. ceylanicum, A. duodenale, Necator
CC      americanus or Heligmosomoides polygyrus.
CC      The proteins pref. have 2 NAP domains and specifically inhibit
CC      the catalytic activity of the factor VIIa/TF complex in the
CC      presence of factor Xa or a catalytically inactive factor Xa deriv.,
CC      do not specifically inhibit the activation of factor VIIa in the
CC      absence of TF and do not specifically inhibit prothrombinase.
SQ      Sequence      107 AA;

Query Match          24.1%; Score 83; DB 1; Length 107;
```

Best Local Similarity 56.3%; Pred. No. 6.86e+00;
Matches 9; Conservative 4; Mismatches 2; Indels 1; Gaps 1;

Db 40 CERCKTETSEEDDY 55
|:|:| | | | | | | | | | |
QY 102 CQRCRCK-EICEEERY 116

RESULT 14

ID W22150 standard; Protein; 626 AA.

AC W22150:1997 (first entry)

DE Peanut allergen Ara hi.

KW vaccine; seed storage protein; allergen; allergy; hypersensitivity;

KM monoclonal antibody; ELISA; analysis; Ara hi.

OS Arachis hypogaea strain Florunner.

FT Key Location/Qualifiers

FT Peptide 1..22

FT Protein /label= Sig-peptide

FT Modified_site 521..523

FT /note= "N-glycosylation site"

PN W09724139-A1.

PD 10-JUL-1997.

PE 23-SEP-1996; U15222.

PR 04-MAR-1996; US-610424.

PR 29-DEC-1995; US-009455.

PA (UYAR-) UNIV ARKANSAS.

PI Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;

PI WPI; 97-363453/33.

DR N-PSDB: T76613.

PT Peanut allergens Ara hi and Ara hII - used for vaccination and in

PT two-site monoclonal antibody based ELISA

PS Claim 31, Page 172; 354pp; English.

CC This polypeptide comprises major peanut allergen Ara hi (W22149).

CC Its sequence was deduced from cDNA clone P41b (T76613), isolated

CC from peanut seed cDNA using a primer (see T76616) based on an

CC isolated Ara hi peptide (see W24206). The sequence shows

CC significant homology with the vicilin family of seed storage

CC proteins of other legumes. The allergen is recognised by serum

CC IgE from a large proportion of individuals with peanut

CC hypersensitivity. Ara hi and Ara hII (see W24164) can be used to

CC raise monoclonal antibodies which are used in a specific two-site

CC Mab ELISA for the detection of Ara hi or Ara hII (claimed). IgE-

CC binding Ara hi antigen epitopes (see W24165-87) may be used in

CC vaccines to protect against allergic reactions to peanut allergens,

CC e.g. anaphylactic shock.

CC Sequence 626 AA;

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PI Mukherjee R;
DR WPI; 96-087756/09.
DR N-PSDB: T10583.
PT Screening methods for identifying NUC protein inhibitors - for use
PT as potential agents for the treatment of hyperlipidemia,
PT hypercholesterolemia and hyperlipoproteinemia
PS Claim 44; Page 29-31; 45pp; English.
CC A novel human peroxisome proliferator activated receptor (PPAR),
CC designated hNUC1B (R89214), is expressed from a cDNA clone (T10583)
CC isolated from a human kidney cDNA library. hNUC1B is a member of
CC the PPAR family and can be used to screen NUC protein inhibitors.
SQ Sequence 441 AA;

Query Match

Best Local Similarity 29.6%; Pred. No. 1.44e+01;

Matches 8; Conservative 7; Mismatches 11; Indels 1; Gaps 1;

Db 107 EYKCRSCRIQKKRNKQCYCRFC 133

QY 81 DCQCCRCRCRQESGPRQCYCQ-RRC 106

Search completed: Sat May 13 10:05:02 2000
Job time : 8 secs.

Query Match 23.8%; Score 82; DB 1; Length 626;
Best Local Similarity 33.3%; Pred. No. 8.27e+00;
Matches 12; Conservative 6; Mismatches 16; Indels 2; Gaps 2;

Db 31 QKTEPCACRQSC-QQEPDDLKOKACSRCTKL 65

QY 75 QDDPQTDG-QQCCRCRCRQESGPRQCYCQRCRKEI 109

RESULT 15

ID R89214 standard; Protein; 441 AA.

AC R89214:

DE Peroxisome proliferator activated receptor hNUC1B.

KW hNUC1B; peroxisome proliferator activated receptor; hyperlipidemia;

KM hypercholesterolemia; hyperlipoproteinemia.

OS Homo sapiens.

PN W09601430-A2.

PD 18-JAN-1996.

PE 28-JUN-1995; U08328.

PR 01-JUL-1994; US-270635.

PA (LIGA-) LIGAND PHARM INC.

